5. Ivan

Program Name: Ivan.java **Input File: ivan.dat**

Ivan has worked on an algorithm for scoring UIL written exams. All questions will be multiple choice with 5 choices, only one that is correct. Correct answers will earn 6 points while incorrect answers will be penalized 2 points. Questions that are unanswered earn no points. He is unsure of his string handling skills and needs you to validate his algorithm.

Can you help Ivan implement his scoring algorithm?

Input: First line of data file contains a positive integer T, the number of exams that will be scored with $1 \leq T \leq 25$. The next line will contain a single string with exactly 40 uppercase letters from { A, B, C, D, E }. Each letter is the correct answer for one of the 40 questions with the first letter for the first question and the remaining letters in sequence to the last question. The following T lines will then contain a single string with exactly 40 uppercase letters from the same set or an underscore '_' which indicates the question was not answered.

Output: For each exam, display one line with the score and the percentage of attempted questions that were correct. Format the line as shown below with the percentage correct rounded to 1 decimal place. If no questions are attempted, set the percentage to 0.0.

Sample input:

```
4
BBEEBCECDCCCCDDBDAEBBBECAEBCBBECAEBCDEED
BBEEBCECDCCCCDDBDAEBBBECAEBCBBECAEBCDEED
BCEEBAECDCDCCDDADAEBEB_CAEBCB_ECAE_CD___
AB_DEA_CDEAB_DEABCD_ABCDEAB_DEABC_EABCD_
BACBEDACBACBEDAAECBDBADCDBBAACCDABECBAAD
```

Sample output:

```
Exam #1: 240 100.0
Exam #2: 164 85.3
Exam #3: -18 18.2
Exam #4: 0 25.0
```